

SEMICONDUCTOR TECHNICAL DATA

MB6S

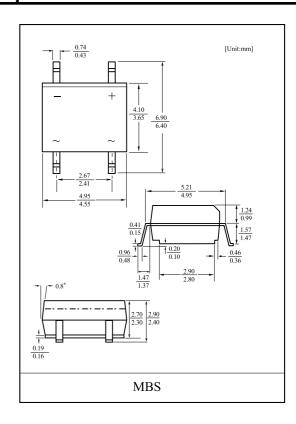
Single-Phase Bridge Rectifiers

FEATURES

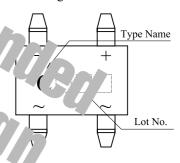
- Plastic package has Underwriters Laboratory flammability Classification 94V-0.
- · Glass passivated chip junction.
- · High surge overload rating: 35A peak.
- · Saves space on printed circuit boards.
- · High temperature soldering guaranteed: 260 /10 seconds.

MAXIMUM RATING (Ta=25)

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CHARACTERISTIC	SYMBOL	RATING	UNIT		
repetitive peak reverse voltage	V_{RRM}	600	V		
RMS voltage	V _{RMS}	420	V		- 0.8
DC blocking voltage	V _{DC}	600	V		
Average forward output rectified current (see Fig.1) On glass-epoxy P.C.B on aluminum substrate.	$I_{F(AV)}$	0.5 (Note1) 0.8 (Note2)	A		0.19
Peak forward surge current	M, 1	35.0	A		
Rating for fusing (t<8.3ms)	I ² t		A ² sec		
Operating Junction and Storage Temperature Range	7j, Tstg	-55~,	7);		
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ELECTRICAL CHARACTERISTICS (Ta=25)

CHARACTERISTIC		SYMBOL	CONDITION	MIN	TYP	MAX	UNIT
Forward voltage		V_{F}	I _F =0.4A	-	-	1.0	V
Leakage current	Ta=25	I _R	V _R =600V	-	-	5.0	
	Ta=125			-	-	100	μA
Junction capacitance		C_{J}	V _R =4.0V, f=1.0MHz	-	13	-	pF
Typical thermal resistance		R _{th} (A) (Note1)	- Junction to ambient	-	-	85	/W
		R _{th} (A) (Note2)	- Junction to amolent			70	
		R _{th} (L) (Note1)	Junction to lead	-	-	20	

Note 1) on glass epoxy P.C.B mounted on 0.05×0.05 "(1.3 × 1.3mm) Pads.

Note 2) on aluminum substrate P.C.B with an area of 0.8×0.8 " $(20 \times 20 \text{mm})$ mounted on 0.05×0.05 " $(1.3 \times 1.3 \text{mm})$ solder pad.

Fig.1 Derating Curve for Output Rectified Current

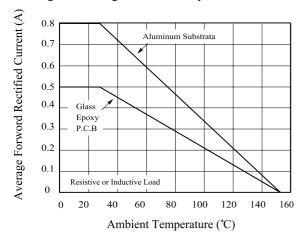


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current Per Leg

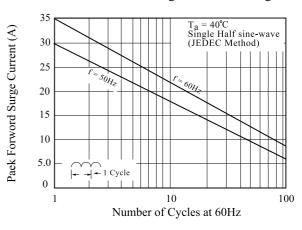


Fig.3 Typical Forwa. 1 3 2 ics Per Leg

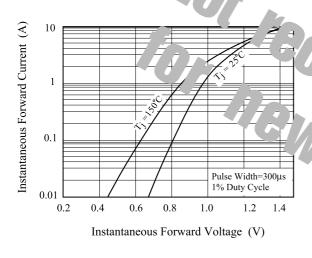


Fig.4 Typical Reverse
Leakage Characteristics Per Leg

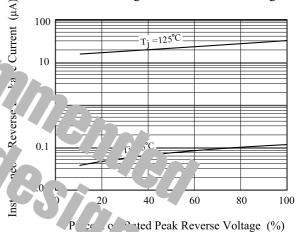


Fig.5 Typical Junction Capacitance Per Leg

